A NEW FOSSIL BIVALVE MOLLUSC FROM SOUTH AUSTRALIA

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Fig. 1.

The remarkable occurrence of fossil Chitons in South Australia has been recorded in this publication (1). Amongst the same material taken from the Torrensville Bore by Mr. W. J. Kimber are ten specimens of a Venerid bivalve hitherto undescribed. The generic location has presented some difficulty, but it is here placed in a new genus, and a previously described recent species is cited as Genotype.

GLYCYDONTA gen. nov.

Shell solid, transversely ovate, equivalve, subequilateral ventral margin convex through its entire length; hinge of three cardinal teeth in each valve, and a series of valid cremitations, strongly resembling taxodom "teeth" of the Glycymerial variety, arising apparently from the cremitation of the antero and postero-dorsal

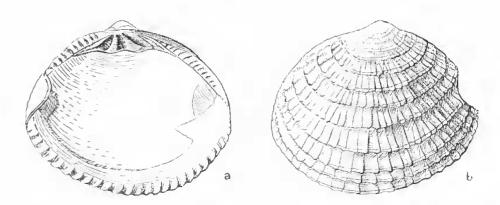


Fig. 1. Glycydonta protomarica: a, internal view; b, external view (\times 5).

margin by the external radial sculpture of the outer surface; sculpture of concentric lamellae and numerous radials which fimbriate the lamellae; internal ventral margin coarsely denticulate, anterior and posterior much more finely denticulate.

Type Venus marica Linn.

Chione marica is recorded from the Philippine Islands, Queensland, New

⁽¹⁾ Ashby and Cotton, Rec. S. Aust. Mus., v. 1936, p. 509, fig. 1-2.

South Wales, and Geraldton, Western Australia (Verco, one valve). There is also a perfect living specimen, from the Verco collection in the S.A. Museum, D. 12886, length. 18 mm.; height, 12·5 mm.; section, 9 mm., labelled "Chione (Omphalo-clathrum) marica Linn., Victoria".

The species is widely distributed in the Indo-Pacific, and it is possible that more than one species is represented under this name.

Veremolpa Iredale, 1930 (Genotype V. ethica Iredale), which is regarded as a section of Chione by Thiele (2), is allied to Glycydonta, but whereas Veremolpa has only very weak marginal cremulations on either side of the cardinals. Glycydonta has a distinct series of taxodont-like "(ee(h)" on either side.

Anomalocardia Schumacher, 1817 = Cryptogramma Mörch, 1853 (Genotype A. flexuosa Linn, from China) is probably the most nearly allied genns. But in that genus the shell is triangular, unequal and prolonged flexuous, and attenuated posteriorly.

GLYCYDONTA PROTOMARICA.

Shell solid, transversely ovate, hinge as in the subgeneric description, with twelve Glycynerid-like "teeth" on either side of the three cardinals; sculpture of about twelve concentric lamellae, with numerous, regular, subordinate radial ribs which fimbriate the concentric lamellae; lumule not well defined, escutcheon obsolete; ventral margin coarsely cremulate internally, cremulations in no way resembling the lateral "teeth" of the hinge. Umbos small, slightly prominent.

Holotype: Length 9 mm., height 7.8 mm., section 5.4 mm.

Torrensville Bore, Sonth Australia, depth 49:0 feet, Upper Pliocene (Reg. No. D. 12888, S.A. Museum). Differs from *Chiane marica* in being much smaller, and in not having the lamellae foliaceous on the posterior dorso-ventral angle.

Another species which could possibly be placed with Chione marica is Chione scandularis Hedley, from Queensland, though this species has much more numerous and finer crenulation on the antero and postero-dorsal border of the hinge.

In concluding, I have to thank Mr. C. J. Gabriel, Honorary Conchologist of the National Museum, Melhonrue, and Miss I. Crespin, Commonwealth Palaeontologist, for comparing this species with others in their collections.

⁽²⁾ Iredale, Rec. Aust. Mus., xvii, 1930, p. 397.